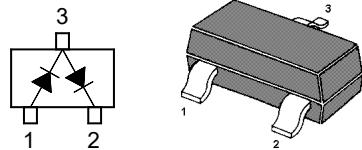


# BAV99

## Silicon Epitaxial Planar Switching Diode

Fast switching in thick and thin-film circuits diode



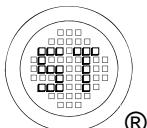
Marking Code: A7  
TO-236 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

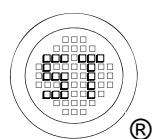
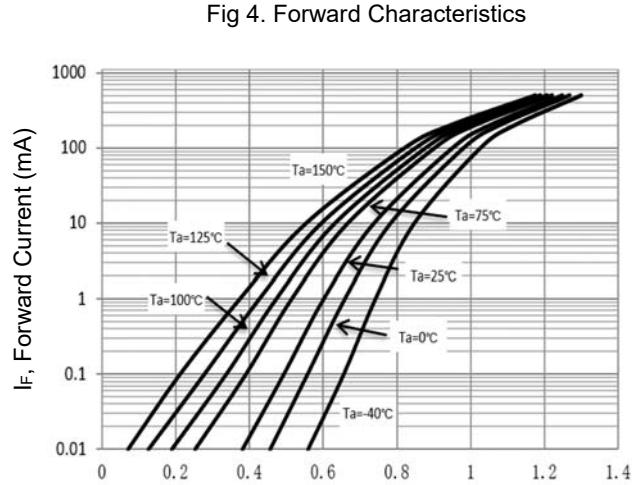
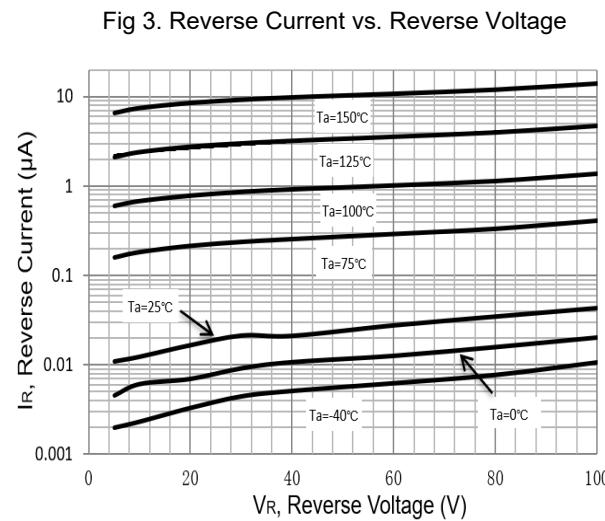
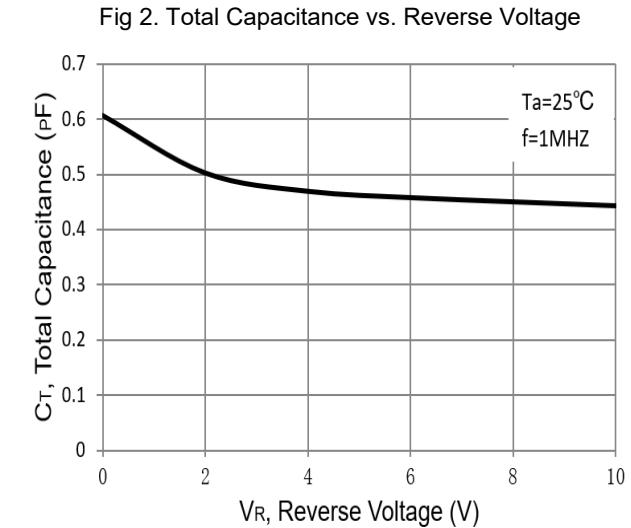
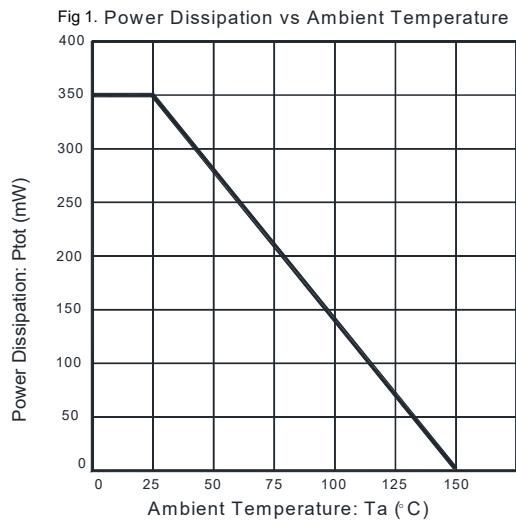
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Continuous Reverse Voltage	$V_R$	100	V
Continuous Forward Current (Double Diode Loaded)	$I_F$	125	mA
Continuous Forward Current (Single Diode Loaded)	$I_F$	215	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non-repetitive Peak Forward Surge Current at $t = 1 \text{ s}$ at $t = 1 \text{ ms}$ at $t = 1 \mu\text{s}$	$I_{FSM}$	0.5 1 4.5	A
Power Dissipation	$P_{tot}$	350	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	- 65 to + 150	°C

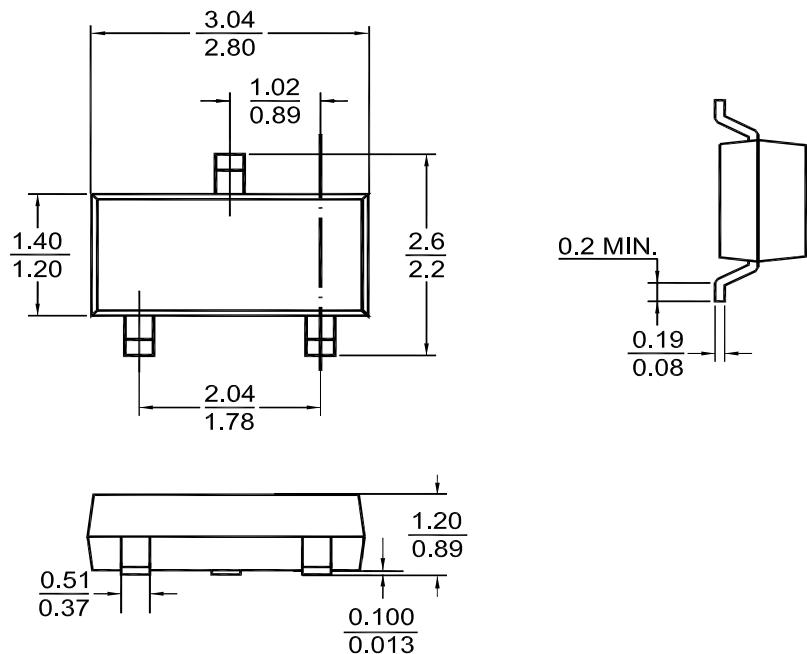
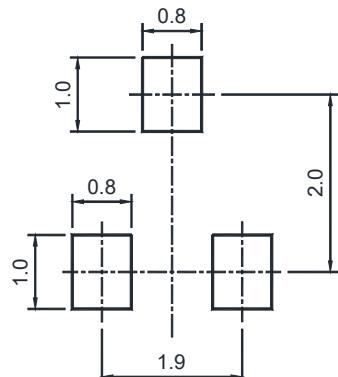
### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	$V_F$	0.715 0.855 1 1.25	V
Reverse Current at $V_R = 25 \text{ V}$ at $V_R = 75 \text{ V}$ at $V_R = 25 \text{ V}, T_j = 150^\circ\text{C}$ at $V_R = 75 \text{ V}, T_j = 150^\circ\text{C}$	$I_R$	30 1 30 50	nA μA μA μA
Total Capacitance at $V_R = 0$ , $f = 1 \text{ MHz}$	$C_T$	1.5	pF
Reverse Recovery Time at $I_{rr} = 0.1 \times I_R$ , $I_F = 10 \text{ mA}$ , $V_R = 6 \text{ V}$ , $R_L = 100 \Omega$	$t_{rr}$	4	ns



## Electrical Characteristics Curves



**Package Outline (Dimensions in mm)****Recommended Soldering Footprint****Packing information**

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
TO-236	8	$4 \pm 0.1$	$0.157 \pm 0.004$	178	7	3,000

**Marking information**

- " A7 " = Part No.
- " YM " = Date Code Marking
- " Y " = Year
- " M " = Month
- Font type: Arial

